

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

In re Patent Application of

Atty Dkt. SCS-550-541

C# M#

Confirmation No. 4617

BUTCHER et al

TC/A.U.: 2183

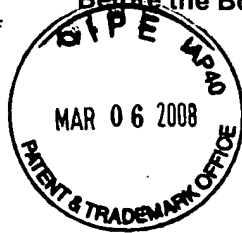
Serial No. 10/807,498

Examiner: A. Li

Filed: March 24, 2004

Date: March 6, 2008

Title: NULL EXCEPTION HANDLING



Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

☐ **Correspondence Address Indication Form Attached.**

☐ **NOTICE OF APPEAL**

Applicant hereby **appeals** to the Board of Patent Appeals and Interferences
from the last decision of the Examiner twice/finally rejecting
applicant's claim(s).

\$510.00 (1401)/\$255.00 (2401) \$

☐ An appeal **BRIEF** is attached in the pending appeal of the
above-identified application

\$510.00 (1402)/\$255.00 (2402) \$

☐ Credit for fees paid in prior appeal without decision on merits

-\$ ()

☒ A reply brief is attached.

(no fee)

☐ Petition is hereby made to extend the current due date so as to cover the filing date of this
paper and attachment(s)

One Month Extension \$120.00 (1251)/\$60.00 (2251)

Two Month Extensions \$460.00 (1252)/\$230.00 (2252)

Three Month Extensions \$1050.00 (1253)/\$525.00 (2253)

Four Month Extensions \$1640.00 (1254)/\$820.00 (2254) \$

☐ "Small entity" statement attached.

Less month extension previously paid on

-\$ ()

TOTAL FEE ENCLOSED \$ 0.00

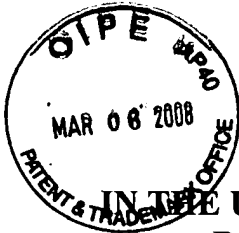
☐ **CREDIT CARD PAYMENT FORM ATTACHED.**

Any future submission requiring an extension of time is hereby stated to include a petition for such time extension.
The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or
asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this
firm) to our **Account No. 14-1140**. A duplicate copy of this sheet is attached.

901 North Glebe Road, 11th Floor
Arlington, Virginia 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
SCS:kmm

NIXON & VANDERHYE P.C.
By Atty: Stanley C. Spooner, Reg. No. 27,393

Signature: _____



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences**

In re Patent Application of

BUTCHER et al

Atty. Ref.: SCS-550-541

Serial No. 10/807,498

TC/A.U.: 2183

Filed: March 24, 2004

Examiner: A. Li

For: NULL EXCEPTION HANDLING

* * * * *

March 6, 2008

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY BRIEF

This Reply Brief is responsive to the Examiner's Answer mailed January 8, 2008, the date of response to which is March 8, 2008. This Reply Brief is responsive to new points of argument and/or admissions contained in the Examiner's Answer.

The Examiner's withdrawal of the rejection of claims under 35 USC §112 (first paragraph) and the withdrawal of the rejection of claims under 35 USC §112 (second paragraph) as noted on page 17, lines 1-4 of the Examiner's Answer, is very much appreciated.

1. The Examiner fails to indicate where any prior art reference teaches the claimed “instruction decoder” which “compares” and then “triggers branching”

A. Click is admitted by the Examiner to not teach the claimed “instruction decoder”

On page 4, lines 5-9 of the Examiner’s Answer, it is admitted that “Click has not explicitly taught . . . an instruction decoder” Additionally, in the table comparing the claimed invention with prior art on pages 12-18, the Examiner admits “Click has not explicitly taught . . . instruction decoder details.” In view of the Examiner’s previous and present admissions that Click does not teach the “instruction decoder” as claimed in independent claims 1, 16, 31 and 46, Appellants are entitled to rely upon this admission in the analysis of prior art.

Notwithstanding the above admissions, on page 17 of the Examiner’s Answer in his “Response to Argument” portion of the Answer, “the examiner submits that he [sic] cannot make an admission as to what the prior art does or does not disclose.” In fact, this is the first thing that an examiner needs to do in terms of supporting a prior art rejection. The Examiner should understand what the prior art does or does not disclose.

Accordingly, the Examiner’s attempt to minimize the prior admissions (noted in Appellants’ Appeal Brief) and indeed the present admissions (set out in the Examiner’s Answer) does not avoid the legal consequence of such admissions against interest with respect to the PTO position.

B. The Examiner, while alleging that Smith teaches the claimed “instruction decoder” fails to point out how or where Smith teaches the claimed interrelationship between the allegedly disclosed instruction decoder and the other portions of the claim, i.e., the fact that the instruction decoder must “compare” and then “trigger branching” under the specified conditions of the independent claims

The Examiner contends that Smith teaches the claimed instruction decoder.

However, the Examiner provides a newly created table on pages 12-28 of the Examiner’s Answer purportedly comparing the instant claim language and the alleged teaching in the prior art. It is noted on page 13 of the table, the Examiner alleges in the second row that Smith teaches the claimed “instruction decoder” but in terms of the claimed interrelationships of that functional decoder with other features (as discussed in rows 3 and 4), the Examiner relies upon the Click reference. However, there is no cited portion of Click in rows 3 or 4 which teach the claimed requirement of “compares” and “triggers branching.”

Instead of pointing out where Click teaches “compares” and “triggers branching” the Examiner cites Click for teaching other and unclaimed features. Even if the Examiner’s allegation were completely correct, there is no allegation by the Examiner that the Click reference teaches the instruction decoder interrelationship specified by the claim, i.e., the claimed comparison. Instead, as alleged by the Examiner, Click merely teaches determining whether a first code portion is redundant with respect to a second code portion.

There is no allegation that Click, without the claimed “instruction decoder” (as admitted by the Examiner) nevertheless teaches the claimed “compares a base register

value, stored within a base register specified by a base register field of said memory access instruction, with a predetermined null value” step as required by claim 1 (and the other independent claims). Without this claimed interrelationship, Click cannot possibly teach this portion of claim 1.

The Examiner makes no allegation that the Smith reference contains any teaching of this interrelationship with respect to the instruction decoder which is alleged to be taught in Smith (and admitted to be missing from Click). Accordingly, the Examiner does not even allege that Appellants’ claimed interrelationship is disclosed in either of the Smith or Click references.

Similarly, as with the “comparison” noted above, the table also clearly identifies that neither Smith nor Click contain any teaching of an instruction decoder which has the additional functionality of “if said base register value matches said predetermined null value, then said decoder triggers branching” Again, because Click is admitted not to disclose the claimed “instruction decoder,” it is unusual that the Examiner relies upon the Click reference for teaching this claimed interrelationship. However, just as with the “comparing” feature, the Examiner’s table on page 13 relies upon the Click reference as allegedly teaching the “triggering” interrelationship.

Moreover, the Examiner doesn’t actually allege that this claimed interrelationship is disclosed in the Click reference. Instead, she cites Click for other features in the Click reference, but features which are not part of the independent claims including claim 1. For example, the Examiner cites column 1, line 66 to column 2, line 47 for the language “when an exception is thrown in response to the identification of a null pointer . . .” as

allegedly suggesting the instruction decoder “triggering” step of claim 1. After wading through this large portion of text, it can be found that the quote is taken at column 2, lines 19-21 and the complete quote reads “[w]hen an exception is thrown in response to the identification of a null pointer, a table is typically accessed to process the exception.”

Thus, the language omitted from the Examiner’s quote confirms that this has nothing to do with an instruction decoder comparing a “base register value” with a “predetermined null value” and then, if they match, triggering branching to a null value exception handler. At best, the quote suggests that if an exception is “thrown,” a table is accessed. This is not the same as triggering branching to “execution of a null value exception handler.”

Accordingly, it is clear that the Examiner’s newly provided table purportedly showing correspondence between the independent claim 1 and portions of the prior art reference simply fails. In addition to reinforcing her admission that Click doesn’t teach the instruction decoder, the Examiner relies upon Smith for teaching an instruction decoder. However, she then attempts to rely upon Click for teaching interrelationships involving the instruction decoder which, one page earlier, she’s admitted clearly fails to teach “instruction decoder details” and now suggests that Click teaches Appellants’ claimed interrelationship.

While the Examiner would appear to wish to withdraw portions of her previous admissions regarding the failure of the Click reference to disclose features claimed in the independent claims, the Examiner reinforces the admissions by the language of the Examiner’s Answer and the purported comparison table.

Accordingly, as noted in section H beginning on page 16 of the Appeal Brief, the Examiner has simply failed to provide any “evidentiary support” for her rejection of claims being unpatentable over Click in view of Smith. The Examiner’s burden is to show “some objective teaching in the prior art.” *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The Examiner is not permitted to merely wave her wand over large portions of the cited prior art references and suggest that the teaching is contained somewhere in there and pass the burden to the Appellant.

Specifically, in order meet her burden of establishing a *prima facie* case of obviousness, the Examiner has to point to where there is a teaching of an “instruction decoder” and where there is the claimed interrelationships of “comparing” and “triggering branching.” As noted in the Appeal Brief section H, “even if Click and Smith were combined, they would fail to teach all claimed elements and interrelationships therebetween and thus the rejections of the independent claims under 35 USC §103 fails.”

The Examiner’s Answer has provided no further information disputing this portion of Appellants’ Brief. Accordingly, the Examiner has not met her burden of providing evidence which establishes a *prima facie* case of obviousness.

**2 The Examiner misapplies the holding of the Supreme Court in
KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396
(S.Ct. 2007)**

The argument presented by the Examiner on page 8 suggests that the Examiner only has to find elements in the Click and Smith references and that, as a matter of law,

all possible combinations are inherently obvious. This is simply not the holding of the *KSR* decision. The Supreme Court clearly stated in its decision that

it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. **To facilitate review, this analysis should be made explicit.** (Emphasis added).

As noted in Appellants' Brief in the second paragraph under section H, even if the Click and Smith references were combined, they fail to teach all claimed elements and all claimed "interrelationships," i.e., the "comparing" and "triggering" by the instruction decoder, and therefore there is no *prima facie* case of obviousness.

However, in section E of Appellants' Brief, which is referred to in the third paragraph of section H, it is noted that the Examiner has failed to meet her burden of providing, identifying or articulating any "reason" or "motivation" for combining the references. The Supreme Court decision in *KSR* did not eliminate the burden on the Examiner to provide some "reason" or "motivation" for combining elements from differing prior art references and then combining them in the manner of Appellants' claims. In fact, the *KSR* decision makes and "explicit" analysis mandatory ("should be made explicit") and the Examiner has simply failed to meet her burden in this matter.

As noted above and as would be obvious to those of ordinary skill in the art, it is not sufficient to merely add an instruction decoder to the Click reference (which the

Examiner admits doesn't teach an instruction decoder), as this does not teach or suggest the claimed functionality, i.e., the comparison with the null value and the triggering of the branch exception if necessary. Why or how the Examiner believes one would be motivated to combine portions of the Click and Smith references (assuming that one of them teaches the instruction decoder and one of them teaches the "comparing" and the "trigger branching" interrelationships) is not explained.

The citation to the *KSR* decision does not mean that the Examiner can ignore the teachings contained in that decision, i.e., there must be some reason or motivation for combining references. It is observed that the Supreme Court specifically included a quote from the Court of Appeals for the Federal Circuit holding that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

As clearly established by the Appeal Brief in section E and relied upon in section H, the Examiner has failed to provide anything more than mere conclusory statements.

3 The Examiner attempts to respond, beginning on page 20, to section G of the Appeal Brief pointing out that the Click reference leads away from the claimed combination

Appellants have previously noted that the use of the Click software removes the need for any hardware-based conversions such as taught in the Smith reference.

Accordingly, the Examiner has not answered the question as to why anyone of ordinary skill in the art, having a software solution as in Click, would utilize hardware-based

conversions such as in the Smith reference. Click clearly, as admitted by the Examiner, fails to teach any “instruction decoder” software or hardware and the fact that Smith teaches a hardware-based instruction decoder without any of the claimed functionality, i.e., “comparing” or “trigger branching,” there is simply no reason for adding such structure to the Click reference.

The Examiner continues to fail to meet her burden of overcoming the rebuttal to any *prima facie* case by the demonstration that the Click reference teaches away from the claimed combination.

The Examiner appears to be of the opinion that, because every element in the Periodic Table is known, all combinations of such elements are either known or obvious in view of the Periodic Table and that no new molecules or compounds can ever be patented.

In the present instance, because Click, as admitted by the Examiner, fails to teach any aspect of an instruction decoder and Smith, even if as alleged by the Examiner, teaches an instruction decoder, neither reference teaches the claimed interrelationship between the instruction decoder and the processing logic, i.e., “comparing” and “trigger branching.”

Moreover, as noted in section F of the Appellant’s Brief, the fact that the addition of an instruction decoder to Click would be redundant is further evidence that the two references are mutually incompatible. The only way the combination would make sense to one of ordinary skill in the art is to have Appellants’ claimed invention in front of them and merely pick and choose elements from the cited references and then combine them in

the manner of Appellants' claim using the appealed claim as a template. This is not the standard of obviousness set out by the Supreme Court in the *KSR* decision or in any Federal Circuit decision of which the undersigned is aware. Accordingly, the Examiner's dismissal of Appellants' "mutual incompatibility" argument is simply incorrect.

Finally, the Examiner suggests that "the choice of hardware or software implementation is a design choice" (last two lines on page 20 of the Examiner's Answer). This statement illustrates the Examiner's lack of understanding in the real-world of hardware and software implementation, especially with respect to data processing systems.

Moving the functionality provided by software in Click to the hardware domain is far from an obvious modification. Additionally, the Examiner provides no support for her conclusion that "the choice of hardware or software implementation is a design choice." Moreover, the Examiner fails to appreciate that in neither Click nor Smith is there a software or hardware implementation in which an instruction decoder "compares a base register value" and based upon the comparison "triggers branching." This is not disclosed in either Click (as admitted by the Examiner) or in Smith. If this instruction decoder in either software or hardware form is not disclosed anywhere in the prior art, how does the Examiner or one having ordinary skill in the art choose this claimed interrelationship without the roadmap of Appellants' independent claims?

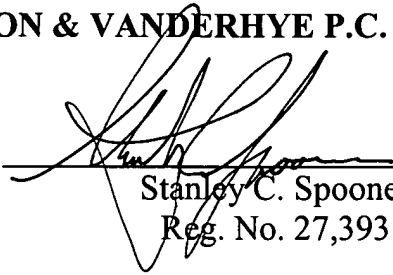
Thus, as noted above, the Examiner's Answer does not provide any additional evidence which overcomes the deficiencies in the Final Rejection as noted in Appellants' Appeal Brief.

Accordingly, there is simply no support for the rejections of Appellants' independent claims or claims dependent thereon under 35 USC §103. Thus, in view of the above, the rejections of claims 1-60 under 35 USC §103 are clearly in error and reversal thereof by this Honorable Board is respectfully requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____


Stanley C. Spooner
Reg. No. 27,393

SCS:kmm
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100